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ABSTRACT

Dissatisfied with results of traditional language instruction at the university level, the German department at the University of California at Berkeley developed an individualized program for introductory German courses. The author discusses the rationale of the program, problems in curriculum development, teacher recruitment, and student attitudes. Several charts, illustrating the success of the program, are included: (1) enrollment in individualized instruction, basic course, reading emphasis, and totals from 1970 through 1972; (2) average numbers of students per instructor; (3) teaching schedule for German 14; (4) testing schedule for German 14; (5) student record; and (6) average number of quarter units achieved per student. (RL)

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ASPECTS IN THE DEVELOPMENT, TEACHING, AND EVALUATION OF AN INDIVIDUALIZED INSTRUCTION PROGRAM*

Klaus A. Mueller

At the outset I would like to comment briefly on instructional innovations in general and Individualized Instruction in particular. I shall then proceed to report on certain specific aspects of our Individualized Instruction program at Berkeley.

I believe we have developed an effective alternative method for teaching German on the college level.[1] The Carnegie Commission Report recommended "less time, more options" among its arguments for the three-year Bachelor's Degree. Harvard President Bok's reaction to this was that "a little bit less of the same old thing would not solve the problem." I wholeheartedly agree. We at Berkeley believe that we have succeeded in constructing a course of study which indeed offers more in less time. We agree with those who believe that college students prefer a more flexible curriculum. The Individualized Instruction mode we have developed does offer a flexibility not heretofore available to our students. Moreover, we have made the course an option, which allows students to compare different learning approaches and to choose the more traditional ones if they wish.

Any new instructional mode entails not only new ways of teaching, new ways of learning, and the use of new materials, but it also imposes on its practitioners a responsibility--an obligation to demonstrate that the new mode is more attractive and effective than existing modes and to insure that such proof or

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[1] For a description and first evaluation of our program see: Gerhard Clausing, Klaus A. Mueller and Wilfried Voge, "Individualized German Instruction at the College Level--A First Appraisal," Foreign Language Annals, Vol. 6, No. 1, October 1972.

* This paper was presented at the 1972 Annual Meeting of ACTFL, in Atlanta, 23-26 November

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or reporting can stand the test of being challenged. Unfortunately, most successful innovations have a bandwagon effect; once begun, especially if "popular," they are described and evaluated in a manner which often leads to a citing of what Stanislav Andreski in his recent book Social Science as Sorcery describes as "quantified trivialities." Just as Andreski is most impatient with these quantified trivialities in the social sciences, we in the humanities in general, and foreign language teachers in particular, are becoming dissatisfied with them. It is therefore necessary that appropriate test instruments are used, that research is carried on in connection with any new teaching mode, and that reports, descriptions and measures taken concern themselves with the truly significant aspects and not with others; that counts and tabulations of facts and statistics are decisive in helping those engaged in the project, as well as others, to reach a decision regarding its worth and future progress.

Individualized Instruction is a case in point. I hope that most of you have had the opportunity to read our first description of the program and the appraisal of the first year of operation which is contained in the October issue of Foreign Language Annals. Those of you who have read our report and those of you who may read the report of our second year of operation and its evaluation, which is not yet published but is available upon request from me, will, I hope, feel that you are not being bamboozled by the facts, figures and tabulations. I would like to stress that we have at least been aware of the difficulties and have attempted to be careful in guarding against presenting trivialities.

As an aside, a recent comment by a widely-read columnist, Herb Caen of the San Francisco Chronicle, might interest you regarding statistics. He wrote that the suicide rate of San Francisco is three times the national average, but that

the best statistics he had run into lately were that San Francisco per capita has more residents over the age of 100 than any other U.S. city. From this he concluded: "Anyway, it's a relief to find out that whereas people die faster here, they also live longer." It is this sort of inference from statistics that ought to be avoided.

As Timothy Foote observes in his recent review in Time magazine of Richard Bach's Jonathan Livingston Seagull, "Even against what seems to be common sense, it is essential to believe in the possibilities of individual endeavor." We at Berkeley also believe in the call of the times, and at times in unorthodox ways in order to effect educational reform. At its core this reform must include giving the student a needed psychological lift and provide an optimal learning environment for personal development. Because I believe that it is quite appropriate to criticize a colleague, a school or a learning theory in public or in writing if such criticism is justified, I invite any of you who, after reading our presentations, observing our program, or hearing my presentation today, have questions or challenge our contentions regarding the new directions in which we have begun to move, to react and comment.

Perhaps the primary reason for our getting involved in the development of an Individualized Instruction program was, of course, the fact that we had ample evidence, gathered over a period of years, that traditional instruction had not produced the desired results for a substantial number of our students. In addition, we were aware that only approximately one-fifth of all students sampled in recent surveys of college graduates had stated that the faculty had actually been important to them in their studies. We also knew that the contacts which did occur between faculty and students were more important when they occurred

on a one-to-one basis. Because of this, one of the main features of our program is the close and personal faculty-student relationship. We had also become aware that programmed learning and a variety of intensive programs or "total immersion" courses have not worked as well in foreign languages as we had thought and hoped. We now know that the lock-step approach to learning a foreign language, as I mentioned earlier, proved wanting, but that self-pacing alone--such as is provided in programmed learning courses--and self-testing without the rather intensive involvement of the teacher do not produce the desired results. For these reasons we decided the time was ripe for innovations and for finding a way which would effectively personalize instruction and be a non-lecture, mastery-oriented, tutored--as well as a--self-paced system of instruction. Our course, in consequence, was developed to answer specifically the need for a course in which not only the learning rate is determined by the student, but in which the teacher adapts to the student's requests and needs.

Let me now mention some specific aspects which might be of interest to you regarding our program which are not included in our first year's report but which are part of the story. Having developed the software of the program,[2]

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[2] F. Alan DuVal, Louise Miller DuVal, Klaus A. Mueller and Herbert F. Wiese, Moderne deutsche Sprachlehre (New York: Random House, 1967).
Edward Diller and James R. McWilliams, Unterwegs (New York: Random House, 1969).
Klaus A. Mueller and Gerhard Clausing, Individualized Instruction Program in Basic German (New York: Random House, 1971).
Klaus A. Mueller and Wilfried M. Voge, Individualized Instruction Program in Intermediate German (New York: Random House, scheduled for future publication).

the textbook, lab components, printed supplements, tapes, instructor's manuals, learning plans for students, guidelines for instructors, practice tests and other materials, the next problem--and the one much less specific and therefore more elusive and more difficult to resolve--consisted of finding the most suitable type of instructor to teach such a course. We learned, first of all, that an instructor capable of teaching in the new manner is a person who has had experience, at least for one year, in the teaching of a course along more traditional lines--specifically, a course requiring pacing which is predetermined and for which certain requirements have been set forth through lesson plans and visitations to other colleagues' classes who teach the same course. It soon became evident to us that an instructor, in order to be effective, must be one who knows well the sequence of structural, lexical and syntactical course content which is contained in Individualized Instruction as well as in a Basic Course, but which in Individualized Instruction is more difficult to control, to present and to reinforce. Although we tried to anticipate many of the problems by providing, in addition to the textbooks, all practice tests, final unit tests, learning plans and all the guidelines which I mentioned previously, it did involve considerable adaptation on the part of each instructor in order to become successful and to teach a program in which the two very important conditions--the determination of learning rate by the students and the adaptation of the instructors to individual students and requests--are provided. Individual student's requests, for instance, may be requests for the substitution of certain readings for others originally scheduled, requests for explanations or practice of forms which in the normal lock-step teaching situation would be routinely and less personally treated. All these require special or additional care and skills.

We have found our best instructors among those who were familiar with the Basic Course, who were sympathetic toward the new learning mode, and who, most importantly, were adaptable. Such instructors are generally those who are genuinely interested in their profession and have the personal needs of their students conscientiously in mind.

Let me now move to an aspect of our program involving the students. We have found that the program, as you will note from the chart, has become increasingly popular. [insert Table 1 here] Students like the features, the philosophy and the content of the course. At the same time we have established that some students are not successful in learning in this new environment. Due to prior learning conditioning, especially during the high school years, we have found that a considerable percentage of our students are unable to exercise the necessary self-discipline and initiative to do what the course requires--namely, determine for themselves the rate at which they learn, to determine when to see an instructor, when to seek help and for what reason, when to complete a practice test, when to report for a final test, and so forth. We have learned that self-pacing is not self-starting. As a consequence we have found that our Basic Course, which is organized in the traditional five-class meetings a week, continues to attract a substantial number of students. The chart also illustrates this. What is significant in this connection is to note that we have attracted a substantial number of additional students to our department after we introduced individualization of instruction who would not otherwise have come to the department. We now know that any foreign language program must offer the student choices of learning modes. It would, based on our experience thus far, seem unwise to convert any program entirely to the

Individualized Instruction mode, since a significant number of students do not function successfully in this learning environment. You may also note on the chart that we offer a third option, namely a reading emphasis course which has a relatively small but nevertheless growing clientele.

I would like now to discuss yet another aspect. This involves the amount and number of instructor-student contacts that occur in our Individualized Instruction program. [insert Table 2 here] The average number of student-instructor contacts is approximately half compared to the Basic Course. Actually, our follow-up studies indicate--and the second year's evaluation confirms--that the amount of cotact a student has with an instructor in Individualized Instruction is closer to one-third of that which he has in the Basic Course. This strongly suggests that Individualized Instruction is three times more efficient as the traditional Basic Course. Most colleagues at other colleges, universities and high schools who are using our materials in a variety of instructional situations report that they can teach more students with fewer instructors than they were able to teach using traditional teaching modes.

I should now like to discuss the matter of scheduling. [insert Table 3 here] As you may note from this sample teaching schedule of Level 1 students of the Individualized Instruction course for the Fall Quarter 1972, which corresponds in content to the first quarter of our Basic Course, we have approximately 190 students at this level and that six instructors are assigned to them. We have decided that each instructor should be available to students for two individual consultation contacts, two group meetings, and two testing sessions per week.

Students may report for testing at any of the times indicated for any level and to any instructor. [insert Table 4 here] Each instructor in the

course contributes two weekly periods to this task. These schedules are made up in consultation with the students at the time of pre-enrollment for the course. Teaching and testing schedules are usually changed two or three times during the quarter to accommodate changing student needs. It is also possible for a student, when the need arises, to consult an instructor other than the one he normally works with.

The instructor he normally meets keeps a record of his work, corrects his workbook, administers and corrects the final unit tests, and so forth. [insert Table 5 here] This makes it possible not only to individualized instruction in the sense of having students determine the rate at which they learn and what they would like to emphasize, but also makes it possible to effectively personalize it. As a consequence the student meets his instructor more often on a one-to-one basis than in the Basic Course.

Finally I would like to mention an aspect which is still troubling us and which all of you have or will face as you become involved in individualization of instruction. It concerns the determination of the learning rate by the student. We have the problem that a great number of students have good intentions at the beginning of the quarter but end up with very little accomplishment in terms of completed units at the end. We have found that the average number of units completed by students in all levels of the course is now approximately 2.8. [insert Table 6 here] The normal number of units earned in the Basic Course is five per quarter. As a consequence students must not only be careful that they maintain a minimum number of total units on their study lists in order to remain full-time students for each quarter, but each student has to be aware, as must the instructors, when there is danger that the total number of required

units may not be completed. Instructors often need to encourage these students in a variety of ways. We have no problem with students who complete more units than planned. It is possible for students to complete twenty units in one quarter. These units correspond to our Basic German 1-4 courses and are the equivalent of four quarters in the Basic Course. We have thus far had approximately ten students who have achieved twenty units in one quarter. We are now working on schemes designed to solve this problem. In the future it is likely that each student will be required to pledge to complete a minimum number of units at the beginning of the quarter. This will serve him as a guide, will give us a better forecast of how much staffing we will need, and will give the student, the administration, the dean and the registrar a guarantee that the student will complete the total minimum number of units each quarter in order to maintain full-time student status. One of the most attractive and the most important feature of the Individualized Instruction program is precisely the feature that the student is the one who determines how fast and how much he learns at any given time. This necessarily carries with it certain risks. Whether we shall solve all our problems in this regard remains to be seen.

TABLE 1

ENROLLMENT IN INDIVIDUALIZED INSTRUCTION, BASIC COURSE, READING EMPHASIS AND TOTAL

FALL QUARTER 1970 TO FALL QUARTER 1972

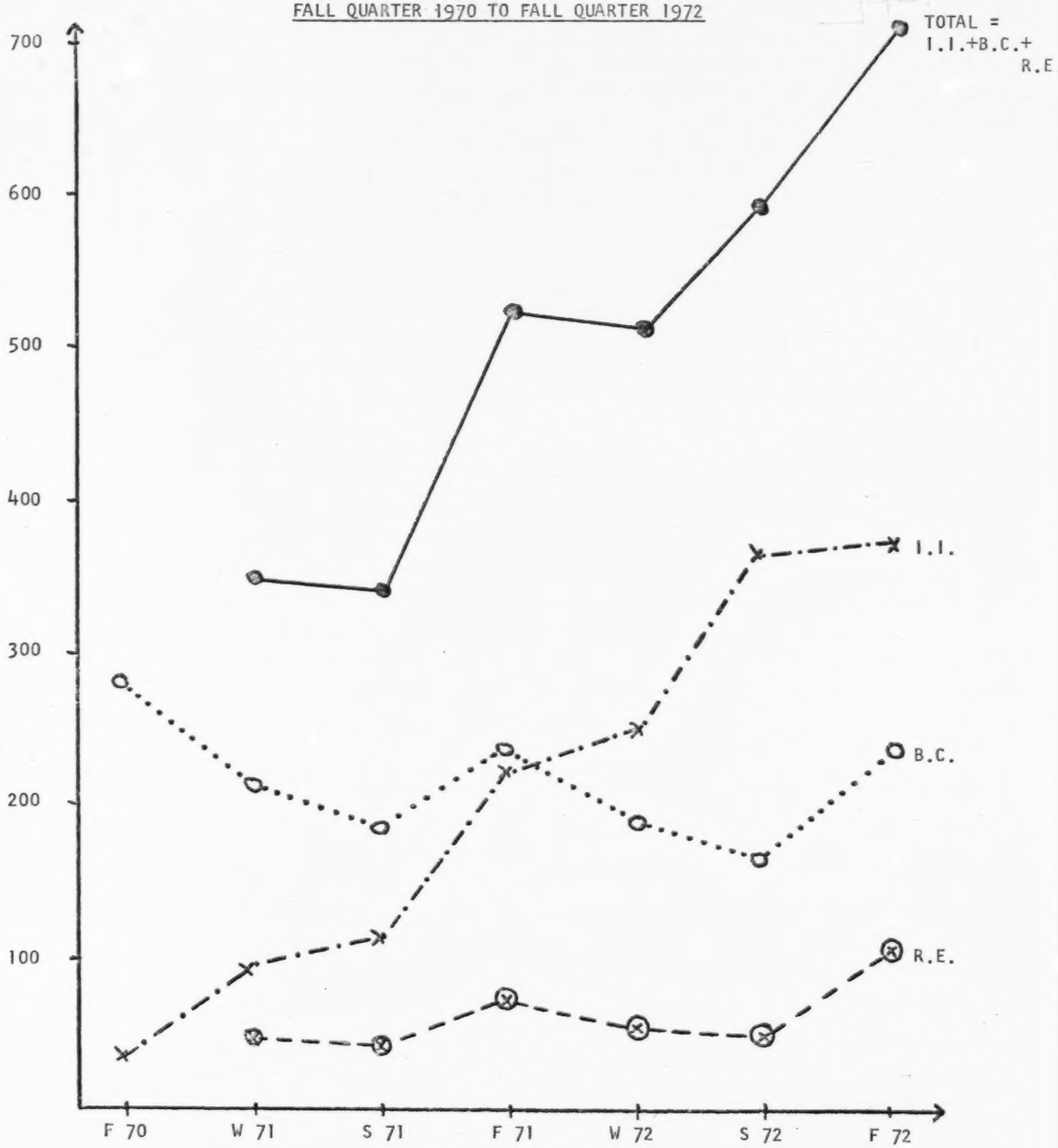

TABLE 2

AVERAGE NUMBER OF STUDENTS PER INSTRUCTOR

FALL QUARTER 1970 TO FALL QUARTER 1972

	I.I	B.C.
F 70	9.8	10.6
W 71	11.5	12.6
S 71	12.2	12.8
F 71	19.5	13.4
W 72	22.2	14.2
S 72	35.7	16.2
F 72	30.5	15.2

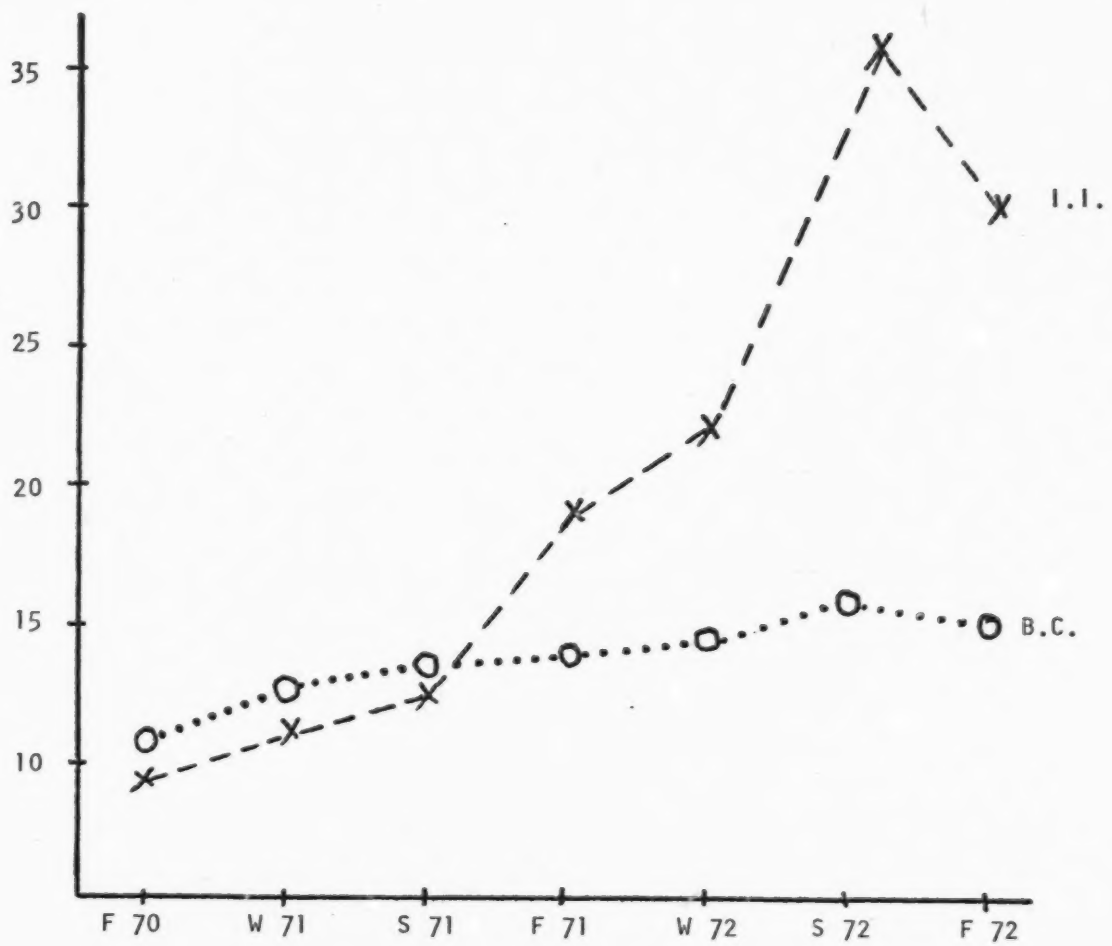

TABLE 3

TEACHING SCHEDULE FOR GERMAN 14

FALL 172 -- LEVEL I

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8	Section 1 Class in 183Dw. Section 2 CONS. in 289Dw.			Section 1 CLASS in 183Dw.	Section 1 CONS. 183 Dw.
9	Section 4 CLASS 287 Dw.	Section 1 CONSULTATION 219 Dw.	Section 2 CONSULTATION 287 Dw.		Section 2 CLASS 287 Dw.
10			Section 4 CONSULTATION 89 Dw.		Section 4 CONSULTATION 89 Dw.
11	Section 5 CONSULTATION 89 Dw.	Section 2 CLASS 89 Dw.			Section 5 CONSULTATION 89 Dw.
12	Section 3 CLASS 183 Dw.		Section 5 CONSULTATION 83 Dw.	Section 3 CLASS in 83 Dw. Section 4 CLASSS in 183 Dw.	
1	Section 6 CLASS 233 Dw.	Section 6 CONSULTATION 233 Dw.	Section 3 CONSULTATION 233 Dw.	Section 5 CLASS 233 Dw.	Section 3 CONSULTATION 233 Dw.
2			Section 6 CLASS 247 Dw.	Section 6 CONSULTATION 247 Dw.	

INSTRUCTORS:

Sec. 1 Mr. Wolfram
Sec. 2 Mrs. Painter
Sec. 3 Mrs. Hagedorn
Sec. 4 Mrs. McFarland
Sec. 5 Miss Roe
Sec. 6 Miss Sun

TABLE 4

TESTING SCHEDULE FOR GERMAN 14 - FALL 1972

ALL LEVELS

	9	10	11	12	1	2
MONDAY		X	X	X	X	X
TUESDAY			X	X	X	X
WEDNESDAY	X	X	X	X		
THURSDAY	X	X	X	X	X	
FRIDAY	X	X		X	X	

TABLE 5

German 1&

STUDENT RECORD

Quarter

Student's Name

Units on study list, other than German

Instructor

I. ACHIEVEMENT

Unit #																							
Dia-logs																							=
Arbeit.																							
Frac. Test Date																							
Inst. Sig.																							
AUT Date																							
Test Sig.																							
Grade																							

AUT = Achievement Unit Test

II. ATTENDANCE

Week										
Class										
Consultation										
Class										

TABLE 6

AVERAGE NUMBER OF QUARTER UNITS ACHIEVED PER STUDENT
FALL 1970 - FALL 1972